ENTERED

1600

RAW SEQUENCE LISTING   DATE: 08/18/2003
PATENT APPLICATION: **US/10/026,952A**   TIME: 09:02:09

Input Set : **N:\Crf3\Refhold\J026952.raw**
Output Set: **N:\CRF4\08182003\J026952A.raw**

```
 1 <110> APPLICANT: Nazarenko, Irina
 2         Rashtchian, Ayoub
 3         Solus, Joseph
 4         Pires, Richard M.
 5         Darfler, Marlene
 6         Gebeyehu, Gulilat
 7         Astatke, Mekbib
 8 <120> TITLE OF INVENTION: Primers and Methods for the Detection and
 9         Discrimination of Nucleic Acids
10 <130> FILE REFERENCE: 0942.4980006
11 <140> CURRENT APPLICATION NUMBER: US/10/026,952A
12 <141> CURRENT FILING DATE: 2002-04-30
13 <150> PRIOR APPLICATION NUMBER: 60/330,468
14 <151> PRIOR FILING DATE: 2001-10-23
15 <150> PRIOR APPLICATION NUMBER: 60/139,890
16 <151> PRIOR FILING DATE: 1999-06-22
17 <150> PRIOR APPLICATION NUMBER: 60/175,959
18 <151> PRIOR FILING DATE: 2000-01-13
19 <150> PRIOR APPLICATION NUMBER: 09/599,594
20 <151> PRIOR FILING DATE: 2000-06-22
21 <150> PRIOR APPLICATION NUMBER: 09/748,146
22 <151> PRIOR FILING DATE: 2000-12-27
23 <160> NUMBER OF SEQ ID NOS: 139
24 <170> SOFTWARE: PatentIn version 3.1
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27 <211> LENGTH: 23
28 <212> TYPE: DNA
29 <213> ORGANISM: Artificial Sequence
30 <220> FEATURE:
31 <223> OTHER INFORMATION: Primer
32 <220> FEATURE:
33 <221> NAME/KEY: misc_feature
34 <222> LOCATION: (18)..(18)
35 <223> OTHER INFORMATION: Fluorescently labeled
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41 <212> TYPE: DNA
42 <213> ORGANISM: Artificial Sequence
43 <220> FEATURE:
44 <223> OTHER INFORMATION: Primer
45 <220> FEATURE:
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RAW SEQUENCE LISTING   DATE: 08/18/2003
PATENT APPLICATION: US/10/026,952A   TIME: 09:02:09

Input Set : N:\Crf3\Refhold\J026952.raw
Output Set: N:\CRF4\08182003\J026952A.raw

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47 <222> LOCATION: (1)..(1)
48 <223> OTHER INFORMATION: Fluorescently labeled
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54 <212> TYPE: DNA
55 <213> ORGANISM: Artificial Sequence
56 <220> FEATURE:
57 <223> OTHER INFORMATION: Primer
58 <400> SEQUENCE: 3
59       ggtctacagc caccatgaga agg                              23
61 <210> SEQ ID NO: 4
62 <211> LENGTH: 23
63 <212> TYPE: DNA
64 <213> ORGANISM: Artificial Sequence
65 <220> FEATURE:
66 <223> OTHER INFORMATION: Primer
67 <400> SEQUENCE: 4
68       ggggctgcga ctgtgctccg gca                              23
70 <210> SEQ ID NO: 5
71 <211> LENGTH: 23
72 <212> TYPE: DNA
73 <213> ORGANISM: Artificial Sequence
74 <220> FEATURE:
75 <223> OTHER INFORMATION: Primer
76 <400> SEQUENCE: 5
77       tgccggagca cagtcgcagc ccc                              23
79 <210> SEQ ID NO: 6
80 <211> LENGTH: 20
81 <212> TYPE: DNA
82 <213> ORGANISM: Artificial Sequence
83 <220> FEATURE:
84 <223> OTHER INFORMATION: Primer
85 <220> FEATURE:
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87 <222> LOCATION: (1)..(1)
88 <223> OTHER INFORMATION: Fluorescently labeled
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90       aataatagga tgaggcagga                                  20
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93 <211> LENGTH: 20
94 <212> TYPE: DNA
95 <213> ORGANISM: Artificial Sequence
96 <220> FEATURE:
97 <223> OTHER INFORMATION: Primer
98 <220> FEATURE:
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RAW SEQUENCE LISTING   DATE: 08/18/2003
PATENT APPLICATION: **US/10/026,952A**   TIME: 09:02:09

Input Set : **N:\Crf3\Refhold\J026952.raw**
Output Set: **N:\CRF4\08182003\J026952A.raw**

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106 <211> LENGTH: 20
107 <212> TYPE: DNA
108 <213> ORGANISM: Artificial Sequence
109 <220> FEATURE:
110 <223> OTHER INFORMATION: Primer
111 <400> SEQUENCE: 8
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115 <211> LENGTH: 23
116 <212> TYPE: DNA
117 <213> ORGANISM: Artificial Sequence
118 <220> FEATURE:
119 <223> OTHER INFORMATION: Primer
120 <400> SEQUENCE: 9
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124 <211> LENGTH: 24
125 <212> TYPE: DNA
126 <213> ORGANISM: Artificial Sequence
127 <220> FEATURE:
128 <223> OTHER INFORMATION: Primer
129 <400> SEQUENCE: 10
130      ggcattgccg acaggatgta gaag                                 24
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133 <211> LENGTH: 18
134 <212> TYPE: DNA
135 <213> ORGANISM: Artificial Sequence
136 <220> FEATURE:
137 <223> OTHER INFORMATION: Primer
138 <400> SEQUENCE: 11
139      gggccggact cgtcatac                                        18
141 <210> SEQ ID NO: 12
142 <211> LENGTH: 28
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144 <213> ORGANISM: Artificial Sequence
145 <220> FEATURE:
146 <223> OTHER INFORMATION: Primer
147 <400> SEQUENCE: 12
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153 <213> ORGANISM:
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     161 <220> FEATURE:
     162 <223> OTHER INFORMATION: Primer
     163 <400> SEQUENCE: 14
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     167 <211> LENGTH: 23
     168 <212> TYPE: DNA
     169 <213> ORGANISM: Artificial Sequence
     170 <220> FEATURE:
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     172 <400> SEQUENCE: 15
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     176 <211> LENGTH: 24
     177 <212> TYPE: DNA
     178 <213> ORGANISM: Artificial Sequence
     179 <220> FEATURE:
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     190 <400> SEQUENCE: 17
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     197 <400> SEQUENCE: 18
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     203 <213> ORGANISM: Artificial Sequence
     204 <220> FEATURE:
     205 <223> OTHER INFORMATION: Primer
     206 <220> FEATURE:
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     208 <222> LOCATION: (18)..(18)
     209 <223> OTHER INFORMATION: Fluorescently labeled
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215 <212> TYPE: DNA
216 <213> ORGANISM: Artificial Sequence
217 <220> FEATURE:
218 <223> OTHER INFORMATION: Primer
219 <220> FEATURE:
220 <221> NAME/KEY: misc_feature
221 <222> LOCATION: (22)..(22)
222 <223> OTHER INFORMATION: Fluorescently labeled
223 <400> SEQUENCE: 20
224       gtgtccttct catggtggct gtag                                   24
226 <210> SEQ ID NO: 21
227 <211> LENGTH: 24
228 <212> TYPE: DNA
229 <213> ORGANISM: Artificial Sequence
230 <220> FEATURE:
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232 <220> FEATURE:
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234 <222> LOCATION: (22)..(22)
235 <223> OTHER INFORMATION: Fluorescently labeled
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237       gtgtccttct catggtggct gtat                                   24
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240 <211> LENGTH: 25
241 <212> TYPE: DNA
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243 <220> FEATURE:
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247 <222> LOCATION: (23)..(23)
248 <223> OTHER INFORMATION: Labeled with fluoroscein
249 <400> SEQUENCE: 22
250       ctaccgggtg tctgtgtctc ggtag                                  25
252 <210> SEQ ID NO: 23
253 <211> LENGTH: 20
254 <212> TYPE: DNA
255 <213> ORGANISM: Artificial Sequence
256 <220> FEATURE:
257 <223> OTHER INFORMATION: Primer
258 <400> SEQUENCE: 23
259       cgtacctggc tatctgtgtc                                        20
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262 <211> LENGTH: 20
263 <212> TYPE: DNA
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RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 08/18/2003
PATENT APPLICATION: US/10/026,952A   TIME: 09:02:10

Input Set : N:\Crf3\Refhold\J026952.raw
Output Set: N:\CRF4\08182003\J026952A.raw

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:85; N Pos. 23
Seq#:92; N Pos. 32
Seq#:129; N Pos. 16
Seq#:131; N Pos. 1,2

VERIFICATION SUMMARY　　　　　　DATE: 08/18/2003
PATENT APPLICATION:　**US/10/026,952A**　　　TIME: 09:02:10

Input Set : **N:\Crf3\Refhold\J026952.raw**
Output Set: **N:\CRF4\08182003\J026952A.raw**

```
L:155  M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (13) SEQUENCE:
L:198  M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (18) SEQUENCE:
L:486  M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (48) SEQUENCE:
L:493  M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (49) SEQUENCE:
L:500  M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (50) SEQUENCE:
L:703  M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (71) SEQUENCE:
L:849  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:85 after pos.:0
L:925  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:92 after pos.:0
L:932  M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (93) SEQUENCE:
L:965  M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (96) SEQUENCE:
L:1094 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (107) SEQUENCE:
L:1101 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (108) SEQUENCE:
L:1162 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (115) SEQUENCE:
L:1209 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (120) SEQUENCE:
L:1216 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (121) SEQUENCE:
L:1250 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (125) SEQUENCE:
L:1290 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:129 after pos.:0
L:1316 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:131 after pos.:0
L:1367 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (136) SEQUENCE:
L:1374 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (137) SEQUENCE:
L:1381 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (138) SEQUENCE:
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STATISTICS SUMMARY DATE: 08/18/2003
PATENT APPLICATION: **US/10/026,952A** TIME: 09:02:10

Input Set : **N:\Crf3\Refhold\J026952.raw**
Output Set: **N:\CRF4\08182003\J026952A.raw**

Application Serial Number: US/10/026,952A
Alpha or Numeric or Xml: Numeric
Application Class:
Application File Date: 04-30-2002
Art Unit: 1600
Software Application: PatentIN3.1
Total Number of Sequences: 139
Total Nucleotides: 3010
Total Amino Acids: 0
Number of Errors: 0
Number of Warnings: 21
Number of Corrections: 0

MESSAGE SUMMARY

300 W: 17 ((50) Intentionally skipped Sequence)
341 W: 4 ((46) "n" or "Xaa" used)